BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

August 15, 2001

Browning Ferris Industries of CA, Inc.
Ox Mountain Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019

Attention: Mr. Lochlin Caffey
Environmental Manager

Application Number: 17439
Plant Number: 2266
Equipment Location: Ox Mountain Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019

Dear Mr. Caffey:

This letter is submitted in response to your comment letter dated April 17, 2001 concerning the draft Major Facility Review (MFR) Permit for the Ox Mountain Sanitary Landfill, Facility #A2266.

Response to General Comments

The Bay Area Air Quality Management District (hereafter referred to as BAAQMD or the District) added additional monitoring, recordkeeping, and reporting requirements to the MFR permit in order to assure compliance with an existing requirement, whenever the existing monitoring for that requirement was not adequate. The Title V program compels the District to include these additional requirements.

While it is true that the Title V program is not intended to create new emission limits, Section 114 of the Clean Air Act allows EPA to require additional monitoring, recordkeeping, and reporting. Sections 502 and 504 of the Clean Air Act require the permitting authority to include monitoring, recordkeeping, and reporting in Title V permits to "assure compliance". EPA does not consider monitoring to be a new regulatory limit, but rather a tool to enforce existing limitations.

EPA included additional monitoring requirements in the regulations that implement the Title V program: 40 CFR, Part 70. Specifically, the regulations require additional monitoring if the applicable requirement does not require "periodic testing or instrumental or non-instrumental monitoring" (40 CFR 70.6(a)(3)(B)). Section 40 CFR 70.6(c)(1) states that Title V (Part 70) permits shall contain "... testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." It is very clear that Part 70 adds monitoring where the existing monitoring is not adequate. The above requirements are echoed in the BAAQMD's Title V rule: Regulation 2, Rule 6, Major Facility Review.

During development of the draft MFR permit for this facility, BAAQMD staff identified all regulatory requirements that did not have adequate monitoring in either the applicable regulation or an existing permit condition. Although each landfill facility is unique, staff discovered that many of the landfills have similar or common operations that are subject to the exact same regulations and to the same inadequate monitoring requirements. In order to fairly address the need for additional monitoring, staff developed standard permit condition language for each regulatory requirement that lacked sufficient monitoring. This standard permit condition language was used wherever possible and adapted as necessary to accommodate each unique operation. The specific instances of inadequate monitoring and the permit condition changes that were proposed to address this inadequacy were provided to you during development of the draft permit. In particular, please refer to the District's comments in italic text that followed the proposed permit condition changes in the earlier drafts of this permit (strike out and underline versions) and the accompanying correspondence letters. The permit conditions identified in your April 17, 2001 letter are discussed below.

Response to Comments on Standard Conditions

Design Capacity Limits:

In Table II A – Permitted Sources of the draft MFR Permit, the term "Max. Design Capacity" was intended to be consistent with the federal definition of design capacity (40 CFR 60.751). The maximum design capacity was used to establish the applicability of various sections of Subpart WWW and should be the same as the design capacity listed on the Initial Design Capacity Report. According to EPA, this design capacity should include all solid waste and all cover materials except final cover materials. Non-degradable wastes and cover materials may be excluded from the total mass for the purposes of NMOC emission rate calculations, but not from design capacity calculations. The design capacity is usually expressed in terms of volume, but may be expressed in terms of mass, if density calculations and supporting documentation are provided.

This paragraph describes the origin of the limits listed in Table II-A of the MFR Permit. The Max. Design Capacity of 37.9 E6 cubic yards is the limit listed in your Solid Waste Facility Permit that was attached to your Initial Design Capacity Report (dated 6/10/96). Based on information in your Initial Design Capacity Report, this limit clearly includes cover materials and inert materials in addition to waste. The limit of 25.5 million tons of refuse in place was based on the 1991 Final Environmental Impact Report for the landfill expansion. In the description of the proposed project, the 1991 FEIR states that this landfill will have a refuse capacity of approximately 25.5 million cubic yards. Assuming a compacted waste density of 1 ton/yd^3, the maximum cumulative waste capacity was determined to be 25.5 million tons.

The District has recently received a copy of your revised Solid Waste Facility Permit that was issued on June 26, 2001. This permit indicates that the current design capacity of the landfill (the air space limit including all waste and cover materials) is 49 million cubic yards. The District evaluated the air quality impacts associated with expanding the landfill from 37.9 to 49.0 million cubic yards in Application #18429. From Table I of the materials submitted for Application #18429, the maximum refuse in-place is 22.74 million tons. All POC and toxic emission increases for this facility were based on the projected amount of landfill gas (9600 cfm of LFG) generated by 22.74 million tons of refuse.

The District agrees that the limits listed in Table II A of the MFR permit are no longer correct. The District is proposing to change the limits as indicated on the following page. In order to be consistent with the current Solid Waste Facility Permit, the District will change the maximum design capacity from 37.9 to 49.0 million cubic yards. The District will also clarify that this limit includes all waste (decomposable and inert) and cover materials.

In addition to the design capacity limit discussed above, it is important to include limits on the daily waste acceptance rate and the cumulative amount of waste placed in the landfill. Changes to these limits could result in emission increases that would be subject to new source review. The daily waste acceptance rate limit (3598 tons/day) will remain the same. The District will create a new limit of 22.74 million tons for the maximum cumulative waste in-place (waste only). This limit was chosen because it is the amount of waste that all POC and toxic emissions were based on. This limit is also equivalent to the limit that you requested in your April 17, 2001 letter:
(37.9 E6 yd^3)*(1200 pounds/yd^3)/(2000 pounds/ton) = 22.74 E6 tons
However, the District prefers to keep this limit in units of tons for consistency with the District's database and your annual reporting requirements, which require you to report the amount of waste (tons) received per year and the cumulative amount of waste (tons) in place.

The District also proposes to modify Permit Condition # 10164, Part 2, as indicated on the following page, to reflect the modifications to the design capacity and waste acceptance limits discussed above.

Blowers

All abatement equipment for this facility (A-4, A-5, and A-6 Landfill Gas Flares) has federally enforceable limits on the amount of landfill gas that may be burned in these devices. Therefore, having a limit on the amount of gas collected by the blowers is redundant. The District agrees to delete the blowers from source description for S-1 in Table II A.

Table II A - Permitted Sources

S-#	Description	Make or Type	Model	Capacity
1	Browning-Ferris Industries of CA, Inc.: (Active Solid Waste Disposal Site with Active Gas Collection System)	Accepting MSW, agricultural waste, demolition waste, auto and tire waste, sewage sludge, and asbestos.		Max. Design Capacity (waste and cover, excluding final cover) = ~~37.9~~49.0 E6 yd^3 (~~29.0~~37.5 E6 m^3) ~~and 25.5 E6 tons (23.1 E6 Mg)~~ Max. Waste Acceptance Rate = 3598 tons/day Max. Cumulative Waste In-Place = 22.74 million tons (20.6 million Mg)

Table II A - Permitted Sources

S-#	Description	Make or Type	Model	Capacity
	~~2 blowers (1 in use, 1 back-up)~~	~~Lamson~~	~~552-203600-GB~~	~~20 hp, 900 scfm, each~~
	~~1 blower (1 in use)~~	~~Lamson~~	~~854-0004-GB~~	~~60 hp, 2400 scfm~~
	~~2 blowers (1 in use, 1 back-up)~~	~~Hoffman~~	~~75103A1~~	~~100 hp, 4000 scfm, each~~

Condition # 10164

For S-1, BROWNING-FERRIS INDUSTRIES OF CA, INC.; A-4, MODIFIED LANDFILL GAS FLARE; A-5, REPLACEMENT LANDFILL GAS FLARE; AND A-6, NEW LANDFILL GAS FLARE:

2. Total waste accepted and placed at the Los Trancos Canyon Landfill (S-1) shall not exceed 835,000 tons during any consecutive twelve-month period; nor 3,598 tons during any one day. The total cumulative amount of all wastes placed in the landfill shall not exceed 22.74 million tons. **The maximum design capacity of S-1** (total volume of all wastes and cover materials placed in the landfill, excluding final cover) **shall not exceed** ~~37,900,000~~49.0 million **cubic yards** ~~or 25,500,000 tons~~. **To confirm compliance with this part, the Permit Holder of S-1 shall maintain daily records, summarized on a monthly basis, of the amount of waste accepted and placed in each area of the landfill. [Basis: Cumulative Increase]**

K. Accidental Release:

As discussed in our October 2, 2000 letter, your facility is not exempt from 40 CFR Part 68, because the Fuels Regulatory Relief Act only exempts the use of landfill gas when it is used as a fuel in a process that produces heat or electricity. Burning landfill gas in a flare does not qualify your process for the Fuels Regulatory Relief Act exemption. However, you submitted documentation on November 6, 2000 demonstrating that you will store less than 10,000 pounds of methane on site. Since your process will store less than a threshold quantity of a regulated substance, the provisions of 40 CFR Part 68 do not apply (40 CFR 68.10(a)) and a Risk Management Plan is not required. The District removed these provisions from your permit per our January 3, 2001 letter. Section K was subsequently added to your permit in error and will be removed, as indicated below.

~~K. Accidental Release~~

~~This facility is subject to 40 CFR Part 68, Chemical Accident Prevention Provisions. The permit holder shall submit a risk management plan (RMP) by the date specified in §68.10. The permit holder shall also certify compliance with the requirements of Part 68 as part of the annual compliance certification, as required by Regulation 2, Rule 6. (40 CFR Part 68, Regulation 2, Rule 6)~~

Response to Comments on Equipment

The District concurs that the Landfill Gas Flares (A-4, A-5, and A-6) should be allowed to burn sufficient propane to light the flare pilot during start-up. The District will change Table II-B as shown below:

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
4	Modified Landfill Gas Flare, burning propane (during start-up only) and landfill gas ~~exclusively~~	S-1	See Table IV-G	See Table IV-G	See Table VII-G
5	Replacement Landfill Gas Flare, burning propane (during start-up only) and landfill gas ~~exclusively~~	S-1	See Table IV-G	See Table IV-G	See Table VII-G
6	New Landfill Gas Flare, burning propane (during start-up only) and landfill gas ~~exclusively~~	S-1	See Table IV-G	See Table IV-G	See Table VII-G

Response to Comments on Source-Specific Requirements

The District concurs that any requirements that are currently awaiting SIP approval should become federally enforceable upon receiving SIP approval by EPA. The following permit condition will be added to clarify this issue and to prevent the need for an administrative modification in the future.

Condition # 10164

For S-1, BROWNING-FERRIS INDUSTRIES OF CA, INC.; A-4, MODIFIED LANDFILL GAS FLARE; A-5, REPLACEMENT LANDFILL GAS FLARE; AND A-6, NEW LANDFILL GAS FLARE:

33. The non-federally enforceable portions of Regulation 8, Rules 34 and 40, shall be considered federally enforceable if EPA approves the latest rules into the State Implementation Plan or into the State Plan for Municipal Solid Waste Landfills. Any rule or rule section that is replaced by a new approved rule or section shall be considered invalid without necessity of modifying and re-approving the permit. [Basis: Regulation 2-6-207]

Response to Comments on Permit Conditions

Condition # 10164, Parts 14 and 15:

In order to determine compliance with the 8-34-301.1 continuous operation requirement, the 8-34-305 wellhead requirements, and the 8-34-505 wellhead monitoring requirements, the District must have an accurate description of the landfill gas collection system, including the number of wells that are supposed to be operating in each area. This information must be reflected in the permit in order to assure compliance. Regulation 2-1-301 states:

> "Any person who, after July, 1972, puts in place, builds, erects, installs, modifies, modernizes, alters or replaces any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, shall first secure written authorization from the APCO in the form of an authority to construct. Routine repairs, maintenance, or cyclic maintenance that includes replacement of components with identical components is not considered to be an alteration, modification or replacement for the purpose of this Section unless the APCO determines the changes to be non-routine. The use or operation of the source shall initiate the start-up period in accordance with Section 2-1-411."

In accordance with the 2-1-301 above, modifying the landfill gas collection system (increasing or decreasing the number of wells or significantly changing well locations) requires an Authority to Construct. Installing, modifying, or replacing a landfill gas flare would also require an Authority to Construct. The District cannot waive these requirements. However, repairing or replacing wells with identical components would not require an Authority to Construct. The District expects that the 8-34-414 and 8-34-415 repair schedules will typically be used in the event of a damaged or plugged well. In most cases, drilling a new well in a nearby area and abandoning the damaged well can solve this problem. In this case, the replacement well would not require an Authority to Construct. Surface cracks are another common problem that might require the use of a repair schedule, but would not require an Authority to Construct.

The repair schedules were not intended to be relied upon as the sole means for determining when to add new wells. Operators of active landfills should be planning for collection system expansions as new waste is added. One of the purposes of having a design plan is to give the District the opportunity to review and approve long term collection system plans well ahead of time. There should be ample time for the District to issue an Authority to Construct for planned gas collection system expansions, particularly if the requested expansion is consistent with the previously approved design plan. For older collection systems, the monthly and quarterly monitoring programs should indicate system deterioration before an excess occurs. In this case, operators should be looking for such deterioration and begin planning corrective measures, including submittal of a permit application, if necessary. The case where excesses occur, which could not be anticipated and cannot be repaired without the need for an Authority to Construct, is expected to be rare. Even in these rare circumstances, the District can expedite the evaluation of an Authority to Construct to ensure that our evaluation does not impact the compliance schedule.

Modifications of the landfill gas collection system are expected to be "minor permit revisions" as defined in Regulation 2-6-215. As stated in Regulation 2-6-406:
"A facility that has submitted an application for a minor revision may proceed with the revision if the facility complies with the proposed permit terms and conditions."
Therefore, the need to revise the MFR Permit for a collection system modification should have no impact your ability to comply within the 120 days allowed by the repair schedules.

In the past, the District has issued an Authority to Construct for a range of wells that may be installed before the expiration date of the Authority to Construct. The District plans to continue this practice. The actual number of wells necessary for proper operation of the system can then be refined as expansion progresses and during the start-up period allowed by Regulations 2-1-301 and 2-1-411. The final well counts listed in Parts 14.a. and 15.a reflect the minimum number of wells that must be operated. These conditions were intended give you the flexibility to quickly install new wells (within the specified limits) that you requested in the first paragraph on page 4 of your April 17, 2001 letter.

Condition # 10164, Part 16

The Landfill Gas Collection and Control System Design Plan that was submitted for this facility contains general language indicating that the gas collection and control system will be expanded and/or modified as necessary to ensure compliance with the NSPS. It is understood that some wells may need to be shut off, disconnected, or removed from service in order to make repairs or add new components to the collection and control system. However, the design plan does not contain any specific discussion about shutting off, disconnecting, or removing wells from service (i.e. under what circumstances a well would be shut down, how many wells would be allowed to be shut down at one time, for how long, etc.). Therefore, the only approved circumstances and limitations for shutting off wells are those cited in Regulation 8, Rule 34. Changing Part 16 to allow you to shut off wells if allowed by the design plan would be misleading and inappropriate. Note that Sections 8-34-117 and 8-34-118 specifically address the need to shut down wells in order to expand or repair the collection and control systems in order to maintain compliance with the applicable rules.

The 8-34-404 Less Than Continuous Operation Petition is intended to address the potential need for the collection and control system (or portions of the collection system) to operate less than continuously when there is not sufficient gas being produced to maintain proper operation of the collection or control system. Typically, these petitions have only been approved for older inactive or closed landfills whose gas production rates have been documented to be very low or for small areas that contain mainly non-degradable wastes. Since your facility is a relatively new active landfill (and will continue to be active through out the term of the MFR Permit) and you indicated in your design plan that there would be no non-productive areas, Section 8-34-404 is not expected to be applicable at any time during the term of this permit. Therefore, 8-34-404 was not listed as an applicable requirement in Table IV-A and cannot be cited in a permit condition.

Condition # 10164, Part 18:

Regulation 9-1-302 contains a general requirement limiting the concentration of sulfur dioxide to less than 300 ppm on a dry basis. You are correct in saying that the rule does not require monitoring for the general requirement. As was explained above in the response to general comments, monitoring for limits where the applicable requirement contains no monitoring is required by the 40 CFR, Part 70 regulations.

However, the District agrees to reduce the monitoring frequency from a weekly basis to a quarterly basis in accordance with the suggested monitoring frequency in the CAPCOA/ARB/EPA agreement.

34. Total reduced sulfur compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in control systems exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 1300 ppmv (dry). In order to demonstrate compliance with this part, the Permit Holder shall measure the total sulfur content in collected landfill gas on a ~~weekly~~ quarterly basis using a draeger tube. The landfill gas sample shall be taken from the main landfill gas header. The Permit Holder shall follow the manufacturer's recommended procedures for using the draeger tube and interpreting the results. ~~The Permit Holder shall conduct the first draeger tube test no later than 3 months after the issue date of the MFR Permit and weekly thereafter. After collecting three months of landfill gas sulfur content data, the Permit Holder may reduce the sulfur content testing frequency to a monthly basis, if all tests indicate compliance with the limit specified above. After collecting one year of sulfur content data, the Permit Holder may reduce the sulfur content testing frequency to a quarterly basis, if all tests indicate compliance with the limit specified above.~~ [Basis: 9-1-302]

Condition # 10164, Part 19:

Your statement on page 4 of your letter that our formula "... assumes 100% volatility of contaminated soils within one hour of reaching the landfill" is not correct. For clarification, the emission limits in Part 19 only apply to soils that contain VOCs but that are not "contaminated". Soil containing 50 ppmw of VOC or less is not considered to be "contaminated" and is subject to Part 19 but not Part 20. Contaminated soils (containing more than 50 ppmw of VOC) are subject to Part 20 but not Part 19. The emission limits in Part 19 were derived by assuming that 100% of the VOC Content in the soil (as received at the landfill) will be emitted in one day, not one hour.

The District agrees that such VOC emissions may not occur all in one day. VOC will be emitted each time the soil is handled and during each day that the soil is exposed to the atmosphere (during storage or aeration). Since non-contaminated soil has no limits on the types of handling activities that may occur, the number of times soil is handled per day, or the duration of atmosphere exposure time, all of the VOC that remains in the soil when it arrives at the landfill will eventually be emitted to the atmosphere. While it may be possible to develop a more accurate estimate of the percentage of emissions that occur during each on-site handling event, during each day that soil is stored, and during each day that soil is aerated, tracking all of the individual daily emission rates for each soil lot that has not yet been covered by other materials would require cumbersome records. Therefore, staff continues to support using the assumption that 100% of the VOC in the soil (upon arrival at the landfill) will be emitted during one day. This assumption is conservative enough to ensure compliance with the Regulation 8-2-301 standard; and it simplifies the record keeping necessary to demonstrate compliance with 8-2-301.

The District does agree that some VOC emissions will occur between the time that the soil is sampled at the generator site and the time that the soil arrives at the landfill. The rules and permit conditions allow sites to determine whether or not the soil is contaminated by using the VOC Content measured at the generator site or by measuring the VOC Content of the soil measured upon receipt by the landfill. Since the limits in Part 19 are based the VOC Content of the soil upon receipt by the landfill, the development of an emission equation based on the VOC Content of the soil measured at the generator site may be justified.

However, the District does not agree that the VOC Content of the soil received by the landfill will be 53% less than the VOC Content of the soil measured at the generator site. The value of 53% was based on the "Technical and Regulatory Analysis Relating to the Handling of VOC Soil and VOC Contaminated Soil" that was attached to the March 22, 2001 comment letter from

the Keller Canyon Landfill. Table 1 in this analysis misrepresents the reference that it was based on (Table 15 of the cited Reference 6). Table 15 presents the fractional contributions of various activities to the total VOC emissions that occur at a remediation site and not a percentage emitted of the total VOC that was measured in the soil. Table 1 also incorrectly described the fifth activity as "Exposure of Contaminated Soil" and seems to infer that this exposure only occurs at a site other than the waste generator site. Table 15 actually calls this activity "Exposure of contaminated zone" and refers to the exposure of the contaminated soil still in the ground at the generator site. As stated on page 19 of the Reference 6 document, "Once the material was offsite, emissions were no longer considered." This statement does not mean that the offsite emissions were zero but rather that the offsite emissions were outside the scope of the study. Therefore, Table 15 of Reference 6 actually indicates that, if you know that 100 pounds of VOC have been emitted prior to receipt by an offsite entity, then 83 pounds of those emissions occurred due to excavation, truck loading, and transport. The remaining 17 pounds of VOC emissions occurred during exposure of the "contaminated zone" at the generator site. Table 15 provides no information about the VOC Content measured at the landfill compared to the VOC Content measured at the generator site.

The type of soil, type and age of contamination, number of handling steps, type of excavation/handling/storage activities, and transport practices will impact the amount of VOC that is emitted before the soil is received by the landfill. District staff is currently evaluating numerous EPA documents to determine if sufficient information is available to develop a conservative estimate of the percent reduction in the soil VOC Content measured at the generator site (between the time the soil is sampled at the generator site and the time the soil arrives at the landfill). Upon completion of this evaluation, the District will consider revising Part 19.

Condition # 10164, Part 20:

You also stated "... Part 20.k. is incorrect. Contaminated soil is clearly not a decomposable waste. Soil, even with high petroleum hydrocarbon content, does not anaerobically degrade to create any significant quantities of methane. Therefore, it should not be included [in] the amount of decomposable waste for compliance with the NSPS and Rule 34 or for estimating emissions."

The subsections were renumbered and Part 20.l. is now the correct subsection reference. This subsection was added pursuant to EPA's 1998 guidance document for the MSW NSPS: Municipal Solid Waste Landfill New Source Performance Standards (NSPS) and Emission Guidelines (EG) – Questions and Answers (page 16, answer to question III-5), which states:

> "In a landfill that has municipal solid waste all the waste is included in calculating the design capacity. Non-degradable waste cannot be subtracted from the permitted landfill design capacity. However, non-degradable waste can be subtracted from the mass of solid waste when calculating the NMOC emission rate because such waste would not produce NMOC emissions. Non-degradable waste is defined as waste that does not break down through chemical or microbiological activity. Examples include concrete, municipal waste combustor ash, and metals. Petroleum contaminated soils (PCS) and paper mill sludges likely contain organics that could be emitted as MSW landfill gas emissions. Therefore, emissions from PCS and sludges would need to be accounted for in the emission estimate only."

Although contaminated soils are not expected to generate significant amounts of methane, contaminated soils will contribute to the amount and characterization of landfill gas. After

burial, the remaining organic compounds will volatilize into the air space of the landfill. Landfill gas collection systems will encourage this volatilization due to the reduced pressure in the air space. Collection systems need to be sized and installed in a timely manner to control the emissions generated by decomposing refuse as well as other sources of emissions such as contaminated soils or decomposable cover materials (i.e. green waste or sludge). The District added Part 20.l. to ensure that these emissions would not be overlooked during planning and design of the collection system and to prevent circumventing the control requirements if contaminated soils are segregated from other waste areas. EPA clearly intended to subject the emissions from contaminated soils buried in landfills to the NSPS control requirements. Therefore, the District intends retain subpart 20.l.

Condition # 10164, Part 22:

You are correct that Part 22 currently does not allow NMOC outlet concentration to be used for demonstrating compliance. The following condition change is proposed to address your comments and clarify the applicable requirements.

22 Each Flare (A-4, A-5, and A-6) shall ~~achieve a minimum destruction efficiency of 98% by weight for non-methane organic compounds (NMOC) and total organic compounds, during all times that landfill gas is vented to the flare. [Basis: 8-34-301, NSPS: 40 CFR 60.752(b)(2)(iii)(B)]~~ meet all of the following requirements:

a. For each flare, the destruction efficiency of total hydrocarbons shall not be less than 98% by weight. [Basis: 8-34-301.3, SIP 8-34-301.2]; and

b For each flare, the destruction efficiency for total non-methane organic compounds (NMOC) shall not be less than 98% by weight unless the outlet NMOC concentration is less than 20 ppmv, expressed as hexane at 3% oxygen on a dry basis. [Basis: 40 CFR 60.752(b)(2)(iii)(B)]; and

c Effective July 1, 2002, for each flare, the destruction efficiency for total non-methane organic compounds (NMOC) shall not be less than 98% by weight unless the outlet NMOC concentration is less than 30 ppmv, expressed as methane at 3% oxygen on a dry basis. This subpart is not federally enforceable unless EPA approves the October 6, 1999 version of Regulation 8, Rule 34 into the SIP. [Basis: 8-34-301.3]

Condition # 10164, Part 23

You stated that the phrases "flue gas temperature" and "combustion zone temperature" are confusing. However, Part 23 does not use the phrase "flue gas temperature". For Part 23, the temperature limits should apply to the temperature that is being measured pursuant to Part 24, which is the temperature of the primary combustion zone in each flare.

You objected to the District retaining the current minimum temperature limit of 1200 °F. You also stated that you could not identify the basis for the 50 °F temperature reduction allowed by Part 23. The basis for both of these requirements is explained below.

Part 23 subparts a.-c. identify the minimum combustion zone temperature for each flare (in degrees Fahrenheit) that was determined from the most recent source test data. These limits were determined using the NSPS equation shown below:

$T_{min} = T_{avg} - 28$ °C
T_{min} = minimum combustion zone temperature limit, °C
T_{avg} = average combustion zone temperature measured during source test, °C

However, the temperature of 28 °C (82.4 °F) is not the same as the change of a temperature (Δ T = 28 °C = 50.4 °F). Converting the entire equation to degrees Fahrenheit yields:

$T_{min} = T_{avg} - 50$ °F
T_{min} = minimum combustion zone temperature limit, °F
T_{avg} = average combustion zone temperature measured during source test, °F

For example, if the source test measured 800 °C. The minimum temperature limit would be (800-28)=772 °C. Converting the two temperatures from Celsius to Fahrenheit yields a source test temperature of 1472 °F and a minimum temperature of 1422 °F, with a difference of 50 °F.

The requirement that the minimum combustion zone temperature for each flare not be less than 1200 °F is the current minimum temperature requirement for these flares and was based on the temperature needed for adequate destruction of toxic air contaminants. This temperature could be modified at a later date, if you demonstrate that a lower temperature would not increase emissions of toxic air contaminants above the emission rates used in the risk screening analysis for the flare or that the facility will comply with the District's Toxic Risk Management Policy at higher flare emission rates.

Condition # 16315, # 16316, #16317:

Per your request, the District will delete three sources (S-12 Stockpile of Green Waste, S-13 Tub Grinder and Conveyor, and S-14 Diesel Engine for S-13 Tub Grinder) and the associated permit conditions from your District and MFR Permits. Your April 17, 2001 letter was the first notification that the District has received about the shut down of these sources. Please provide the shut down date for each source.

Response to Comments on Applicable Limits and Compliance Monitoring Requirements

Tables VII-A through VII-D will be modified to reflect the deletion of sources and condition changes noted in this letter.

The design plan for the Ox Mountain Sanitary Landfill contained no specific proposals for alternative wellhead requirements. As a result, no alternatives were reviewed or approved. Since there are no approved alternative limits stated in permit conditions, Regulation 8-34-305 requires that the facility comply with the 8-34-305 wellhead requirements. Therefore, adding a general condition allowing alternative compliance limits would not be appropriate.

Response to Comments on Test Methods

The design plan contained no specific requests for alternative test methods. Therefore, none have been reviewed or approved. Most of the test methods referenced in Regulation 8, Rule 34 (Sections 601-608) do not allow the use of a test method not specifically cited, even if the APCO and EPA have approved the test method. Therefore, adding general language in the Title V permit to allow the use of additional test methods would not be appropriate.

The District will soon prepare a revised MFR permit, which will include the permit condition changes noted in this letter and any necessary changes to Tables II through VII. Since none of the proposed changes are substantive, the District plans to issue the final MFR Permit with no further public comment.

If you have any further questions, please call me at (415) 749-4704 or your Permit Engineer, Carol Allen, at (415) 749-4702.

Very truly yours,

William deBoisblanc
Director, Permit Services Division

Cc: Mr. Jim Gunderson
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Half Moon Bay, CA 94019

WDB:CSA:csa